DOCUMENT RESUME

ED 107 047 EC 072 648

TITLE	The Educable Mentally Retarded Student in the Secondary School: What Research Says to the Teacher.
INSTITUTION	National Education Association, Washington, D.C.
PUB DATE	75
NOTE	35p.
AVAILABLE FROM	NEA Publications, Order Department, The Academic Building, Saw Mill Road, West Haven, Connecticut 06516 (Stock No. 1033-7-00)
EDRS PRICE	MF-$0.76 HC Not Available from EDRS. PLUS POSTAGE
DESCRIPTORS	*Classification; *Educable Mentally Handicapped; *Educational Needs; Exceptional Child Education; Learning Processes; Mentally Handicapped; *Secondary Education; *Social Attitudes

ABSTRACT

The pamphlet offers an overview of the position of the educable mentally handicapped (EMH) student in secondary schools in discussions of the classification of EMH pupils, social attitudes, learning processes, and educational needs. Definitions (current and historic) and causes of MH are canvassed briefly. Historical, cultural, and current attitudes toward MH are considered along with recent legislation mandating the rights of mildly retarded children to education. Explained are developmental and difference theories of the learning processes of EMH pupils, and the need for improved teacher education. A discussion of ways to meet the educational needs of EMH pupils considers curriculum design, instructional methods, educational diagnosis, and the roles of teachers, administrators, parents, employers, and the community. Comments of pupils classified as EMH on their condition are included. (GW)

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What Research Says to the Teacher

The Educable Mentally Retarded Student in the Secondary School

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NOTE

Previously published material used in this book may use the pronoun "he" to denote an abstract individual, e.g., "the student." We have not attempted to alter this material, although we currently use "she/he" in such instances.

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Stock No. 1033-7-00

Library of Congress Cataloging in Publication Data

National Education Association of the United States.
The educable mentally retarded student in the secondary school.

(What research says to the teacher)
Bibliography: p.
1. Mentally handicapped children—Education (Secondary) I. Title. II. Series.
LC4604.N38 1975 371.9'282 75-1431
ISBN 0-8106-1033-7

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This report was developed by the staff of NEA Publishing in consultation with David L. Temple, Jr., who is a special education teacher at Thomas A. Edison High School, Fairfax County, Virginia. Mr. Temple is chairperson for the Fairfax Education Association Human Relations Committee, which has been conducting a study of the effects of special placement on secondary students.

Special acknowledgment is made to Charles Dent of the staff of NEA Publishing for his contribution to the report.

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WHO IS THE STUDENT?

They had each spent very pleasant summers visiting relatives, frolicking along beaches, and, at times, "just goofing off." Both stopped by this morning to say hello to their teacher. Their excited chatter and their friendly smiles belied their protests that school was "the last place" they wanted to be. Here they were, telling their teacher about themselves and school, almost in spite of themselves.

Tony, 16, had just returned from a month's stay in Arizona—Phoenix he was quick to add. Rather quiet, yet by no means an introvert, Tony by his own estimation had become quite an expert on the living habits and geography of the American Southwest. He has always been an avid reader, talking about what he had learned from reading. Girls had not discovered Tony as yet, although he was showing obvious gestures toward making some discoveries of his own. Finally there was the new math course in which he had just been enrolled. His apprehensions were momentarily supplanted by his pride in being selected.

Sara, 17, had not wanted to leave school last June for summer vacation, but she would not have admitted it very readily. Along with her classmates, she was bemoaning her misfortune of once again being back in school. Sara had never participated in a lot of school activities, but she was a conscientious and active student. Unlike Tony, Sara seemed to thrive on her relationships with friends, particularly boys. And, also unlike Tony, Sara seemed to be interested only in the immediate world around her—home, school, church, etc. Yet there was a common experience that bound and for the greater part of their lives may continue to bind Tony and Sara together—name-calling, stigmatization, and educational confusion.

Tony and Sara were destined to this type of education early in their public school careers when some well-intentioned educators decided that they would best be placed in classes for the educable or mildly mentally retarded. They are presently juniors in high school, where they remain in classes for the educationally handicapped.

Just what sort of education students like Tony and Sara need is the topic of much discussion and controversy among educators today, just as lawmakers dispute their legal rights. This report is based on the research in the area of special education. It aims to help teachers learn more about the issues while keeping sight of the human necessities in their professional responsibility.

Understanding Retardation

In th nineteenth and early twentieth centuries, many people thought mental retardation was exclusively a genetic phenomenon. One famous expositor of this type of thinking was Henry Goddard who in 1912 developed the concept of "fixed intelligence." (17) He believed that a child was born with a given or fixed range of intellectual ability that matured autonomously, independent of environmental influences. In fact, Goddard considered environment to have no effect at all on the child's developing cognition. There were many who agreed with Goddard's thesis; its implications were that society had no responsibility for the development of a child's intellect as there was little influence it could effect. This belief, with its roots in laissez-faire political philosophy, still has a number of supporters today. Another implication of the genetic approach was that the retarded—through reproducing—posed the threat of contaminating healthy races and cultures.

Tests have played a decisive role in influencing how we understand mental retardation. Alfred Binet in 1905 was the first person to develop a test for determining intelligence. Binet assumed that the tasks on his tests required "intelligence" for completion and, for this reason, his tests came to be known as "intelligence tests." Consequently those who did not perform adequately were defined as intellectually subnormal. The content of the test in effect described the condition of the taker. (23) Educators today are aware of the circularity inherent in this form of testing and of the tremendous human damage done by labeling people as subnormal intellectually, and effectively discarding them from society.

Popular attitudes have changed in the last one-half century. The retarded are no longer seen as a menace but rather as a group with special needs. Most people today consider all behavior, including examples of mental retardation, as a function of an individual's genetic and personal history. In particular, medical and social scientists have come to realize the crucial role learning plays in infancy and childhood for all children—the mildly retarded child as well as the normal child. Although the reasons for mild retardation are biological as well as environmental, the environmental reasons are extremely important. Environment to a great extent shapes what sort of life a child will lead, what sort of person she/he will become. Mildly retarded persons like Tony and Sara are capable of leading

useful, important lives—if the environment encourages a positive development.

Definitions

A generally agreed-upon definition of mental retardation is the first factor necessary for helping retarded students. In the American Association on Mental Deficiency's (AAMD) sixth *Manual on Terminology and Classification in Mental Retardation*, mental retardation has been redefined to exclude the borderline normal category (68-83 Stanford-Binet or 70-84 Wechsler). This in part reflects the growing recognition that environmental factors in a person's developmental process are crucial. The following is AAMD's definition:

> Mental retardation refers to significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior, and manifested during the developmental period. (19)

The AAMD's system of classification takes both a behavioral and biomedical approach in defining retardation. Other definitions, such as the American Medical Association's, do the same.

The need for a common vocabulary is obvious. In recent years, the progress in research has been phenomenal; much of our biomedical understanding today is predicated on findings made in the past few years. Likewise, the growth in technologies for training and rehabilitation has been tremendous. To ensure orderly, fruitful application of new research findings and technology, clear communication in the field is essential and would be impossible without a terminology.

The dangers of a global terminology are equally obvious. Definition tends to calcify or formularize what at times should be left flexible in order to include the complexities of human behavior. Inherent in all professional terminologies is the tendency toward arrogance of power—the unconscious self-satisfaction that can result from "knowing" one's subject. Definitions developed in the name of science have at times been misleading, pandering to the fears of what was looked upon as queer and abnormal. One important area of research that has tempered confidence in definitions and the application of labels is that of the self-fulfilling prophecy, particularly in relation to special

education. (40) In assessing the mildly retarded student as a potential learner, teachers must take into account their attitudes toward the student's person and socio-economic status, because at times definitions may be a guise for subjective feelings rather than instruments of objective research. Also in the area of self-fulfilling prophecy, research has shown that a teacher's expectation of a student based on mental age—as opposed to chronological age—can be quite incorrect at the secondary level. This is not because of any unconscious prejudice on the part of the teacher but rather because the conversion system from mental age to chronological age for Stanford-Binet has inherent limitations. (5)

The Causes

Sidney W. Bijou feels that the conditions responsible for "subaverage intellectual functioning," as defined by the American Medical Association, fall into three categories, and he gives examples within each one:

1. Biological, e.g., intrinsic neural organization, motor disorders, and language pathways
2. Socio-cultural, e.g., child-rearing patterns, educational facilities, and medical care
3. Psychological, e.g., sensory deprivation, infant-maternal interaction, and self-concepts. (3)

For Bijou, biological factors affect a person's ability to respond to her/his environment which, in turn, enables further learning (or perpetuates further deprivation). For Bijou and others, the biological factors for mild retardation are probably less a cause for deprivation than are the social and psychological ones. Of course, to be normal a child must be endowed with a brain that can function optimally. However, a child born with a perfectly healthy brain can become retarded—as a result of deprivation of the essential social and psychological factors in her/his environment.

Like Bijou, James Dobson categorizes these environmental factors of deprivation as cultural, maternal, and sensory. (12) Lacking these critical stimuli, the normal brain of a child is not given the opportunity to develop: the brain's "interior environment" becomes deficient, and the child as a consequence grows up mildly retarded. According to The President's Commission on Mental Retardation, only 25 percent of mental retardation is caused biomedically. The remaining 75

percent is due to psychological, socio-environmental, and/or unknown reasons. (35) This would seem to indicate that most retardation can be treated if not prevented. Teachers in the classroom can help prevent an enormous waste of human potential by becoming sensitive to those causes that seem to be socially induced rather than the result of a medical or inherited condition.

George Albee feels that our society's approach to mental retardation has been grossly misdirected in emphasizing biomedical research. (1) With the exception of prenatal and perinatal care of mothers, there is little that medical research can do to eliminate mental retardation. He quotes Edward Ziegler of Yale University to support this:

> We need simply to accept the generally recognized fact that the gene pool of any population is such that there will always be variations in the behavioral . . . expression of virtually every measurable trait or characteristic of man . . . .
>
> Once one adopts the position that the familial mental retardate is not defective or pathological but is essentially a normal individual of low intelligence, then the familial retardate no longer represents a mystery but, rather, is viewed as a particular manifestation of the general developmental process.

Albee does not disregard the significant effects that detrimental environmental factors play but, rather, wants more research in education and rehabilitation and less in the psycho- and biomedical areas. Only in cases where the damage is done from without, such as in lead poisoning, can retardation be biomedically prevented. Children who are retarded as a result of perinatal difficulties—for example, an injury at birth—account for a small minority of all retardates (3½-5 cent) and are usually severely retarded (IQ 20-35 Stanford-Binet or 25-39 Wechsler). (35)

Why Study Retardation

Educators can benefit professionally from acquainting themselves with the mildly retarded student in the secondary school. Studying the mildly retarded can reveal a great deal about the learning process itself. In addition to improving their general experti teachers will find it facilitating to have a familiarity with retardation, as many secondary teachers at one time or another will probably have in their classes a student who is mildly retarded. Sixty percent of all secon-

dary schools have at least one mildly retarded student (6), and of the total number of retarded persons in the U.S. (3 percent of the U.S. population), 89 percent of them are only mildly retarded. Practically all retarded children and youth in school are educable. (35) By examining social attitudes toward retardation, teachers will be in a better position to see how the school can help these and all other students.

HOW WE SEE THE STUDENT

Social Attitudes

Historical

The treatment of the retarded person in the past has not been a pleasant one. Historians record the Spartans' practice of abandoning weak, defective children on mountainsides to die of exposure or fall prey to animals. (8,13) It is more than likely that these children included the retarded. We know that two centuries ago in North America, people were imprisoned, sometimes executed for being possessed by a devil. Again, it seems probable that the retarded were involved. Many historians have pointed out that some of the persons involved in the Salem, Massachusetts, witch trials may have been retarded.

It is easy to criticize smugly these past abuses, but the advance of history has not always meant more enlightened and humane attitudes toward the retarded. Philippe Ariès suggests just this. (2) For Ariès the middle class family unit as we know it today is a creation of the eighteenth and nineteenth centuries—protective of its children, sheltering them from the adult world, keeping them from adult work (and worth). The modern family he describes has rigid expectations of how its children are to live in an individualistic, competitive world. The family in Ariès' *ancien régime*—Europe before the Industrial Revolution—was very different. Children were quickly groomed for adult roles. The retarded, often called "feeble minded," simply assumed roles they were capable of doing—in the same way everyone else found appropriate tasks. The mildly retarded child like the normal child found self-esteem through the quiet acceptance of a society whose harsh exigencies and realities of work were the dominant force

in job choice and weren't often eclipsed by parental expectations of ambition and success. Very possibly the mildly retarded child in eighteenth-century Europe found society more tolerant of differences and more adaptive in utilizing available skills than the American child today. A wise use of history would be to fuse this sense of tolerance born out of necessity with the American experience of social mobility resulting from wealth.

Comparative

There have been very few systematic studies of subnormal intellectual functioning in nonindustrial societies. However, one that does show a humane treatment of the mentally retarded in a nonindustrial society is Eaton and Weil's study of the Hutterites in North America. (14) These people of European descent are recorded as integrating all their members into village life, reserving for the retarded members roles that required little intellect but were nevertheless esteemed since they were necessary to the welfare of the community.

As for an industrial model, there are the Scandinavian countries. An educator, Leopold Lippman, claims we in the industrial societies may be retarding the retarded by "not allowing them to function in normal ways in society and ... as never allowing them to develop normal patterns of behavior." (24) For Lippman, Europeans have less difficulty with this because of the more cooperative relationship they see between the individual and society.

Today

Negative and untrue attitudes toward the mentally retarded persist, especially in the area of criminal and sexually deviant activities. Richard Meile's probability sample of Nebraska had a design that surveyed people who were representative of the state as a whole. (26) Some of the findings of this survey appear on the next page.

Most research does not substantiate these opinions. A study in Ohio in 1972, for example, shows that 83 percent of the 1,898 graduates in a work-study program for the mildly retarded are employed. (36) Studies show that mildly retarded students in regular classes are not rejected by their normal classmates so much on the

basis of intellectual limitations as on the basis of their all-too-often lower socio-economic status. (28) That they are mildly retarded is in large part related to their being poor. The circularity of this dilemma frustrates simple solutions.

General Attitude Questions

	Agree	D.K. (Don't Know)
1. MR is an illness	59.0%	16.3%
2. MR=MI	17.0	13.6
*3. Criminals are MR	38.6	23.6
4. MR inherited	13.5	21.5
5. Once MR always MR	20.5	23.0
6. MR caused by accident to nervous system	47.6	34.5
7. Poor home environment	52.1	16.4
*8. MR one of our most serious health problems	61.6	25.1
9. Most MR should be in hospitals	23.8	16.1
*10. Most MR would be better off in a special hospital for them	37.5	20.0

(*Note starred items)

Negative Stereotyping MR

	D.K.	Yes	Maybe	No
1. MR related to delinquency	8.0%	13.4%	30.6%	46.4 %
2. divorce	12.2	8.9	21.5	55.7
3. sex crime	13.2	23.8	34.6	26.6*
4. drug addiction	14.7	15.1	22.9	46.0
5. alcoholism	12.5	12.2	20.2	53.5
6. homosexuality	24.5	16.2	25.4	32.2*
7. robbery	12.5	7.3	22.9	55.6
8. suicide	13.5	18.2	28.8	37.8*
9. murder	15.4	13.2	30.1	39.8*
10. driving accidents	15.2	9.6	23.7	49.7
11. burglary	13.7	6.5	23.8	54.4

In contemporary American society a large percentage of those classified as retarded come from lower socio-economic and minority groups. In fact, the mentally retarded, who account for 3 percent of the U.S. population at large, account for 10 percent of those in U.S. jails. (48) This type of statistic suggests that the retarded may have more difficulty than normal people in finding a secure place in the society. Religions throughout the world have for centuries taught the same ethic of mutual support and cooperation, but civilizations in the

past, as now, have varied considerably in how they have practiced this ethic in their care for the dependent—young, old, and handicapped.

Cross-cultural studies might also reveal the different effects various child-raising practices have on the development of intelligence. Cross-cultural research into dietary habits, for example, may advance our understanding of organic disorders, the symptoms of which may include retardation.

Legal Rights

The legal right of the mildly retarded child to an education has only recently been defined in the United States. During the early 1970's, there were several court decisions which mandated that school systems provide retarded children with an equal, free education. Two of these decisions* have set precedents for the nation's schools. In essence the decisions are a continuation of the Warren Court's equal protection interpretation of the Fourteenth Amendment, which advanced the cause of general human rights legislation during the 1950's and 1960's. Because the equal protection interpretation has been extended to apply to retarded students, schools are now obliged to provide equal access to differing resources for differing objectives. This means that every child is entitled to a free, public education and must be placed in whatever educational situation is most normal and least restrictive so that she/he can learn most effectively. "Appropriateness" is the key word. Due process is guaranteed to each student with the burden of proof that the student belongs in a special-education situation lying with the school system. In the past it was the parents who had to show cause. As with criminal conviction, the label *EMR* (educable mentally retarded) or "mildly retarded" can carry life-long stigma. School systems in the future will have to exercise great caution in affixing labels. Appropriateness and due process procedures will not eliminate labels, but they will require that labels be accurate. (49)

These decisions will probably have a profound effect in that they will make available to a large number of mentally retarded students a better chance to obtain an education that appropriately prepares

* *Pennsylvania Association for Retarded Children v. Pennsylvania* (Pa. 1971)
Mills v. Board of Education of D.C. (D.C. 1972)

them for independent adult life. As mentioned earlier, 60 percent of all secondary schools have at least one mildly retarded student. (6) Of the total number of mildly retarded students, 84.7 percent are enrolled in secondary schools and constitute 1.4 percent of all secondary school students. (27) There will be few schools not affected.

New legal protection for the mildly retarded is having a wide effect on linguistic and racial minority groups. With the guarantee of due process, Spanish-speaking parents in New Mexico and California have challenged the fairness of tests that in the past have led to the labeling of a disproportionately large number of their children as mildly retarded. (49) In big-city school systems, too, there is perhaps new hope for the disproportionate number of students who, often due to their race, have been tracked as mildly retarded. (46) The court decisions of the 1970's not only should ensure the mildly retarded the education they are entitled to, but equally as important, these decisions may well prevent the labeling of children as retarded when the intention is not special compensatory education but rather racial and linguistic exclusion and isolation.

Conclusion

In the past few decades there has been tremendous progress toward recognizing the mildly retarded student as a human being with needs and interests more similar to than dissimilar from those of any other student. But ancient fears remain. The mildly retarded student has been seen as an object of pity and charity, of ridicule and fear; as a societal menace threatening to contaminate "healthy" genes; and as a holy innocent or child of God. (52) The effect of any of these labels on the student is clear. They dehumanize and destroy a spirit that has no reason to see her/himself as a "problem" until the majority of society attaches the label. In the past we have avoided any serious thinking on this matter by sequestering the retarded from our view. Advocacy groups have demonstrated that isolating the mildly retarded in school can be illegal. Furthermore, advocacy groups have pointed out the loss in human resources when the mildly retarded are denied the education they are capable of attaining. The ideal is a global ecology that involves the welfare of all for the benefit of all. Ecology of this sort will be achieved when the mildly retarded student—like anyone else—is educated to her/his level of highest competency, i.e., "appropriately."

HOW THE STUDENT LEARNS

The Learning Process

The desire to educate all persons—not out of *noblesse oblige* but for the benefit of society as a whole—has fostered greater research into the learning process. Interest in how the mildly retarded learn has increased our awareness of how all students learn. Everyone stands to benefit from this new knowledge.

Biomedical scientists, social scientists, behavioral scientists, and educators alike want to know what it is we need to live socially, what it is society requires of us. The study of mild retardation is helping us better understand the nature and development of intellectual functioning. In examining the learning process, we find a common tendency to equate intelligence with learning ability. However, this conclusion has not been adequately shown by research to convince everyone. (15) The dilemma for many is that we can only measure intelligence by sampling the skills and knowledge the individual has acquired. Unwittingly perhaps, we have defined intelligence in terms of learning ability before establishing that there is a natural connection. Without really understanding why, we measure intelligence and learning ability in the same way: gauging the difference in performance between individuals who are following similar opportunities. Test performance obviously depends on genetic/maturational factors as well as on experiential ones, but it is not clear how they can be isolated.

There are two major learning theories about the mildly retarded student: the "developmental" and the "difference" theories. (21) According to the developmental theory, the mildly retarded student passes through essentially the same cognitive levels as does the normal student, but at a slower rate. The difference theory holds, on the other hand, that the mildly retarded student's cognitive processes are essentially different from the normal student's—that the difference is not just quantitative (rate of learning) but also qualitative (how one learns). There is no definitive study proving or disproving either theory; however, there are studies worth noting.

Several of these studies involve language. According to John B. Carroll, mental retardation provides a "slow motion picture of normal grammatical development." (10) He asserts that the retarded

child learns language in the same way as the normal child does—through the perception of patterns and classifications. Language is defined as a code, a system of patterns. However, there have been no definitive studies at this time that explore the role of language in the development of thought for the retarded. Until there is a more precise understanding of the development of language in relation to the development of general cognitive skills, it will be difficult to decide whether or not retarded children learn qualitatively the same—as long as language is used as the basis for intelligence testing.

In other studies there have been comparisons of the reading abilities of mildly retarded students with normal mental age-mates. (45) The critical deficiency of the mildly retarded was not in their level of abstraction but rather in their verbal performance. Studies have also shown the mildly retarded student capable of significant creative thought. (34) Others have shown that a mildly retarded student's attention span can be increased. (43)

In the area of intelligence performance-level and capacity, it is difficult for anyone to speak with deep assuredness. Findings from research have been growing rapidly in recent years, but to approach the issues adequately and comprehensively, anthropologists, educators, geneticists, psychiatrists, and psychologists all must necessarily be involved. So progress is slow and cumbersome.

Teacher Education

Despite the attention given to learning theory, our present inability to account for human needs and diversity remains paramount. Research has shown that of those people who fall between the extremes of IQ levels, it is impossible to predict their individual social adaptability. (39) We continue to define normalcy in terms of intellect, and yet we know that both normals and subnormals can equally well find acceptable social roles if they are not deterred by society. Simply put, society needs to help the mildly retarded to adapt.

Better teacher education is one way to refocus the teaching of the mildly retarded. That the competencies of special educators will benefit all educators is not a new idea. The following statement by the National Society for the Study of Education was made in 1950:

> . . .the methods which have been developed for exceptional children have yielded gratifying results in the education of all children. . . .We learn about the "normal" from the "abnormal." (30)

Just as our knowledge of the learning process has been increased by a study of the retarded, so has our general teaching technology grown to the benefit of all classroom situations.

Ideas for teacher education are numerous. Some feel that special education courses should be offered more widely on the undergraduate level to expose a greater number of prospective teachers to the many technologies utilized in this field. Special education should have a great deal of practical emphasis on methods, observation and demonstration, and student teaching. Basic child development courses are essential. Practice teaching on a one-to-one basis will help the education student achieve a greater awareness of individual differences and a more personal understanding of the teaching process. It can also give the future teacher a deeper sensitivity to student motivation and interests. In addition to all these school-oriented activities, community work should be considered. Working directly in the community outside the teacher-education school is another way to become sensitive to the child's needs.

The behavioral technique of teaching the mildly retarded should be examined as a way to help the student secure essential academic and social behaviors. According to Sidney W. Bijou, who bases his opinion on the research of the last 45 years, classes following the behavioral model should include the following specific features: 1.) a motivational plan based on positive reinforcements, 2.) programmed instruction in the major academic subjects, and 3.) teachers able to make the classroom environment conducive to academic achievement as well as a pleasant, enjoyable place to be. (4) Foremost in Bijou's thinking is that the same principles of behavior apply to the development of all people—retarded, normal, and gifted.

Finally, behavioral and biomedical research at universities should not be isolated from the technological research being carried out by the education student. Teachers of the mildly retarded must remain in touch with all developments involving cognition and learning theories.

Ideally, teachers want to impart a knowledge that the student will be able to grasp and find useful for living. The more congruent the ex-

pectations of teachers and students, the more easily learning will take place. The "consistency hypothesis" shows that just as curricular, physical, and psychological environments of the school operate together, so do school, home, and peer environments. (16) A set of expectations that reconcile conflict between the retarded student at school and the student outside school obviously has not been developed. But if learning is to take place, the mildly retarded student must not have a sense of gross personal inadequacy. In working toward the goal of teacher-student congruence, teacher education should stress that there is a continuous line along which all human beings have a place for personal gratification and fulfillment. Following are accounts of how some schools and communities are attempting to improve the self-concept of the mildly retarded student.

MEETING THE NEEDS OF THE STUDENT

Curriculum and Instruction

There is much disagreement about special education classes for mildly retarded students. It is not clear whether special classes cost more to operate than does mainstreaming, the integrating of facilities. Efficacy studies on special education classes are for the most part inconclusive since they do not really tell us about the effects of special placement on the student. Furthermore, the evidence is uninterpretable because there is no general agreement on what constitutes the needs and goals for the mildly retarded student. (31) Studies contradict one another as to whether or not students in special education classes adjust better personally and socially than those in integrated facilities. (44)

The nature of curriculum also varies among teachers. In the past mildly retarded students—like all students—have been lumped into groups based on I.Q. It might be well to restructure curricula along the lines of positively defined alternative instructional programs. Students, for example, could be grouped according to the different ways they learn to read or study current events. (38) Categorical designations, such as EMR, dyslexia, etc., are the labels of educational problems but are of little help in setting up educational programs. (37)

Robert H. Bruininks examines three justifications for special education—homogeneous grouping, unique curriculum, and specially trained teachers. (7) Homogeneous grouping has been considered a way to minimize IQ differences among students in a class. Unfortunately, grouping by IQ has led schools to consider mental retardation as a cause of the student's problem rather than an indication of it. Still worse, people who have advocated grouping by IQ assumed that those with similar IQ's would have similar behavioral characteristics. Bruininks concludes:

> No available evidence supports the contention that special classes include children exhibiting similar educational needs, or that such placements lead to greater individualization of instruction. Unfortunately, the assumption that children with similar intelligence quotients also resemble each other closer on other behavioral characteristics was seldom questioned in the development and implementation of programs.

According to Bruininks, the two other justifications, unique curriculum and specially trained teachers, show a similar insensitivity to the real needs of the student. Bruininks cites research to show that neither one is a factor in helping special education meet the needs of the mildly retarded student. Before special education programs are developed in the future, these traditional three justifications should be verified.

Bruininks believes that by applying two major philosophical alternatives, normalization and individualization, education programs for the mildly retarded can be greatly improved. (7) Normalization was developed in Scandinavia; it seeks to expose the mildly retarded student to a daily routine that is as normal as possible. The Normalization Law, passed by the Swedish parliament in 1968, was a first of its kind. Interestingly enough, it was drafted and lobbied into law by a group of parents who were dissatisfied with current laws. Their draft, and the subsequent law, would grant certain rights to all Swedish citizens as soon as they are capable of receiving them. These rights are important enough to be listed in full, and they follow on the next page. To what extent U.S. schools respect these "rights" would be the subject of an interesting study.

The right to a normal rhythm of day.
The right to a normal routine of life.
The right to a normal rhythm of year.
The right to a normal developmental experience of the life cycle.
The right to decide and choose for oneself.
The right to live . . . in a bisexual world.
The right to normal economic standards.
The right to live, work, and play in what is deemed normal and humane for that society. (32)

Individualization aims to adjust each program of study as closely as possible to the unique and individual needs of each student. It is a way of achieving normalization. Appropriate curriculum and instruction are provided for the student through emphasizing normalization and individualization in program development.

The Madison School Plan in Santa Monica, California, is an example of normalization. (47) This plan enables the free flow of students between regular classes and the special classroom ("learning center"). The plan eliminates traditional dual grouping except for administrative purposes. It also coordinates into the student's education a continual assessment of the problem areas that the mildly retarded student encounters in the regular classroom. Rather than being labeled, the mildly retarded are considered to be learners in various stages of preparation for re-entry into regular classrooms.

The Mimosa Cottage Project in Parsons, Kansas, prepares retarded children and youth for normal community life by stressing an individualized approach to instruction. (11) As a result of the intensive personal care at a residential cottage, these students (for the most part mildly retarded) can come to live in a normal community in a normal way. Few of them were moderately or severely retarded, yet due to personal deprivation their adaptability skills were below the level of independent living. For this reason the children and youth in this project were not in contact with normals as in The Madison Plan. However, through individualized learning—much of it achieved by programmed instruction—they were eventually able to join society.

Diagnosis

Proper diagnosis of the student is an essential part of any program. Misjudgements at this stage can be disastrous. The student when suspected of being mildly retarded is usually diagnosed in several general areas, including the following:

1. Perceptual skills
2. Learning
3. Cognitive skills
4. Personality
5. Social character
6. Physical coordination

Because diagnosing the mildly retarded student's needs has such an important influence on the student's education, large school systems should have diagnostic prescriptive teachers. The ultimate purpose of these teachers' work is to link remedial specialists. Because no one profession or discipline contains all the expertise and knowledge needed for an adequate diagnosis, no diagnosis can ever be considered final. (50) Another reason no diagnosis can ever be considered final is that in the healthy school environment each student is constantly learning and, therefore, constantly changing and evolving. For this reason clinical teaching requires that teachers become better acquainted with testing so that they can identify right in the classroom the areas which are most critical to the student. In effect diagnostic clinical teaching offers a means for the teacher to look for learning differences as they develop in the classroom itself. (42) The *homogeneous* class never really did exist because there has always been wide variation among students in a single class. Educational diagnosis is geared for this diversity and is perhaps a more sensitive method of examination since diagnosis can occur in an actual learning setting.

As a result of the court decisions in the early 1970's, the burden of proving a student to be retarded lies with the school system. This is not a simple task. Research findings in each of the six major diagnostic areas are far from definitive—as the section on the learning process indicates. Furthermore it is clear that for the mildly retarded there are some areas where there exist no instruments for assessment. These areas for Donald L. McMillan are the following: 1) expectation of failure, 2) tendency to decrease effort following

failure, and 3) dependency on external rather than on internal reinforcements. (25) The inability to measure these areas, and the roughness in measuring others, leads many educators to consider mainstreaming, or normalization, as a way of ensuring adequate education for all.

The study of tests has continued since Alfred Binet first developed an intelligence test in 1905 and is by no means resolved. Milton V. Wiseland classifies the tests used today, gives reasons for selecting the various types of tests, and elaborates on their unique validities. (51) His study is a thorough review of the many intelligence tests and a useful study for the educator-diagnostician. It is also of importance to all teachers. At the heart of the controversy over the validity of tests is how better ways can be found to place the student in the appropriate classroom setting.

The mildly retarded have the right to an education which will help them develop in three areas: 1) cognitive, 2) affective, and 3) vocational. The cognitive development of the mildly retarded should be pursued despite the disagreement on how students learn. In general the mildly retarded are capable of learning enough math and reading to lead a normal life. Frequently, special classes have failed because they have focused on cognitive variables to the exclusion of the other two areas—affective and vocational. Despite the methods of assessment and types of curricula that have been developed, identifying and measuring the affective development of the student remains extremely elusive for the diagnostician. The affective domain concerns the emotional and social growth of the student and is exclusively related to the concept of self and, ultimately, to learning itself. The vocational development of the mildly retarded should be the least ambiguous part of their education. They need to learn job skills for adult life. There have been no studies showing the mildly retarded as a group to be uncooperative or irresponsible in their jobs. Findings from The President's Committee on Employment of the Handicapped suggest the opposite.

Those Who Help

The Teacher

Mildly retarded students, as well as some others, have frequently experienced educational situations which have allowed for little, if any, success. Failure very often prevails. As a result the temptation to seek any fulfilling esteem model at all has led to criminal behavior and, hence, to detention in correctional institutions. Teachers have an immense responsibility in fostering the healthy growth of their students in the classroom.

The growth of students is also affected in an important way by the total school environment. For this reason, the teacher should be acquainted with the other aspects of school life and how they influence the total student.

For example, what are the student's opportunities to participate in extracurricular activities, such as athletics? Is the otherwise qualified retarded student discouraged from varsity sports? What sort of feelings do administrators and counselors project? Are there paid paraprofessional aides qualified to work with the mildly retarded? Their extra help can contribute enormously to the teacher's individualizing efforts. Extra care should be taken in selecting curricula for the mildly retarded. To compensate for their learning at a slower rate, the curriculum should be directed to more specific goals that are clearly related to the community outside the classroom.

The Administrator

Administrators have a role of obvious importance in the education of the retarded student. It is frequently administrators who have the final authority on making school policy concerning materials, methods, and curriculum alternatives. Many problems retarded students face in school that seem inherent in the system and therefore unsolvable can be resolved with the proper administration. For example, a school that stresses group competition to the exclusion of individualized progress and evaluation is not suitable for many slow learners—as well as normal but nonagressive ones. To alleviate conflict like this, administrators might be encouraged to examine the value structure underlying their school. In this way needed change could be initiated at the decision-making level of the system itself.

The Community

Outside the school, there are many ways the mildly retarded student can be helped. The teacher should be acquainted with them. Much of the student's self-esteem that is vital to classroom learning must in large part be nurtured outside the school after school hours. The teacher can and should have an influence in this.

Games and art can enhance students' learning by making them more confident, more interested in learning and living. Frequently these learning activities are offered in community centers that are operated either by government or parent groups. Dance is one learning activity that has been used quite successfully in the past. (9) A major reason for its success is that it involves several disciplines simultaneously and, therefore, engages the total person. It offers a constructive way to channel conflict and hostility. By encouraging self-expression, dance shows mildly retarded students—sometimes for the first time in their lives—the pleasure of involvement with others. With self-awareness comes awareness of others. Healthy, joyful attitudes which are fostered in creative movement classes can help children in subsequent years at school. It is harder to involve older students in dance than younger ones. However, if they can be shown the maturity of the activity, many hesitations may be overcome. Play acting, music, athletics—all constituent parts of creative movement—can be pursued separately with equal success in the community.

Games and crafts are other activities available in the community. Many educators feel that games can help students learn to develop judgements of themselves and others. (18) Games also give students the experience of helping others and, thereby, provide students the means to learn important social skills. Another educator writes that games are particularly suited for the mildly retarded as games employ repetitiveness, definiteness, and simple vocabulary. (41) Games in this sense not only encourage learning and conceptual development but also help relieve a student's anxiety in the community or school.

Role playing is widely used in school systems. It is an especially valuable means of learning as it can connect classroom activities with similar community activities.

The educator should keep in mind that these learning activities in the community facilitate the development of healthy self-concepts for all students at all levels of functioning—not only for the retarded or

handicapped. All students, regardless of diagnoses, need a balance of expressive and cognitive activities to attain a positive sense of self. As previously mentioned in this report, research has begun to determine that each person is a composite of cognitive, affective, and manual skills who possesses at least a modicum of each. The contributions that learning activities such as games and role playing make to the whole person should be understood by all educators.

Teachers can encourage positive attitudes toward the mildly retarded student on the part of other professionals in the community. One study shows that many obstetricians and pediatricians need to deal more skillfully with the emotional crises that frequently arise in a family when a child is first identified as retarded. Positive attitudes need to begin the day that identification is made: much of this depends on the doctor's approach. Physicians need to become more familiar with the educational and social services available for the future development of the child. (22)

The Parent

Of critical importance to the child's human development is each parent's attitude toward mental retardation. Sometimes teacher visits to the home or to a parent's place of work are necessary as a starter. Many parents unconsciously resent their child and don't understand the nature and characteristics of retardation. As a consequence, parents like this can be overprotective, with the result of keeping their child at an infantile level of dependency as a way of compensation. The child, on the other hand, can sense the parent's latent hostility and can respond ambivalently and at times with unpredictable rashness, which only further exacerbates the hostility and misunderstanding on both sides. Teacher reports show that parents' attitudes reflect that of the community at large. Although they may have greater familiarity, parents may not have a greater understanding of the situation.

Teachers should expect parents to be defensive when approached. If possible, teachers could do a great service by organizing parent study-groups. There are many questions parents will have, and many will involve special knowledge, such as appropriateness of curriculum, job placement, financial aid, and the whereabouts of advocacy groups. The National Special Education Information Center, Washington, D.C., is a project of the U.S. Office of Education,

Bureau of the Handicapped. It has established regional centers throughout the nation to help parents find services for their children.

Sometimes the student should live away from home. In the past there have been—and there still are—residential institutions for the mildly retarded. It is essential that these institutions prepare the student for a normal life and for re-entry into society. In recent years, group homes and half-way houses have become more common. Ideally they should help the student learn to live with others in an atmosphere of mutual respect, which often is tragically missing in the child's natural home. Group homes are all over the country. The National Association for Retarded Citizens has published a booklet giving guidelines for residential alternatives. (29)

The Employer

Many mildly retarded students are aware of the hostility they will face in the world of work. They know from visits to shops that merchants frequently look on them with uncertainty and distrust. These students can easily come to consider employment an unlikely prospect and need the assurance that someone is following them through in their search for employment. Unfortunately, parents frequently do not know what resources are available to assist their child's job search.

Schools should have guidance counselors who serve as a link between classroom teachers and work-study specialists. To succeed, this process must be totally coordinated. The President's Committee on Employment of the Handicapped, Washington, D.C., has state contact representatives throughout the nation for further assistance.

Conclusion

The quality of learning in the classroom is what directly concerns each teacher. The learning process, like the student, can only be understood in its totality. Research on the mildly retarded student necessarily involves the teacher in both theoretical and socio-environmental concerns, some of which may be unfamiliar territory. The work of the teacher is immense, but in a real sense its final merit will only be realized when it succeeds in involving the entire community.

LISTENING TO THE STUDENT

The truisms are many: the mildly retarded student needs help and understanding; the student doesn't need sympathy, just the equal chance for a normal, generative adulthood. Studies documenting the need and plight of the mildly retarded are all too familiar. But it is equally important to see these students in situations where they have demonstrated dignity and courage, even in times of great stress and peril. Robert Perske cites incidents when the mildly retarded have exhibited superior qualities of heroism and altruism. (33)

Anne Marie Henshel has studied the mildly retarded in an instructive way. (16) She has recorded their voices talking about their "retarded" condition. Helen and Clark, both young adults classified as mildly retarded, are two among those she interviewed. The account speaks for them.

Helen

The main problem that she [Helen] encountered, which she belabored throughout the interviews, was that the label "Special Ed." placed her in an unacceptable category. How do other students know who is in Special Education? "They change classes when the bell rings, and they have different classes, you know. And when you go out in the hall and get a drink of water, they can't help but know where you come from. They have one class for us and one class for brain-damaged . . . they know where you come from." The inception of all problems: high visibility. Then the reactions of the other students, that is, the normals: "Someone says, 'Hello, stupid,' and they say, 'See that girl over there, she is Special Ed.' Not only were they called "Special Ed." and "stupid," but also "mental retardates," a label which she totally rejected. They could have called her anything but that! And the vicious circle kept spinning: "I like Kathy, but all the others, they don't like me. They don't want to be seen with me 'cause 'She is in Special Ed.' or something like that. People, they don't like Special Ed. people, and they don't want to be with them." In addition to the stigma and the rejection, there was also the danger of delinquency. As she explained: "They'll come up and say, 'Hey, Special Ed.' and if they do that, I'll just pop off and hit her." And she

went on to detail some fights in which she had been involved. Helen is thus terribly conscious of her problems; extremely lucid, she has figured out all the painful angles.

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And at the time of the third interview, when she was living at the halfway house, she spoke of one of her school friends: "Well, she'd tell you . . . what she thinks, you know, that I'm not really retarded." Although Helen often uttered the terrible words "mental retardate," she rejects the relevance of the label for herself: the others may be retardates, but she is not. Obviously, anyone so labeled by fellow students would have doubts; Helen has doubts, too. She wonders . . . but no. The reality is too terrible to accept.

Clark

Ensconced in a stable and quite independent life style, Clark seems well situated and fairly content. He assesses himself objectively and positively: "Well, I get along with everybody. I make friends. I'm pretty good, I mean, you know. We all have our ways. We have our good ways and bad ways." He does become annoyed by his aunt's constant fear that he will make a poor decision; he has even kept the idea of moving to California from her because he is sure she would fret and worry. She was, at the time of the interviews, nagging him because she thought he was planning to move in with people who "would lead me wrong. But I know that, I ain't going to move in, you know, with the wrong people. I know that." As further testimony to Clark's good sense and easygoing but determined nature, we offer this quote: "I'll listen to an older person, you know, they know better than I do, but I can make my own decisions. I know what's right and wrong. Well, they don't see quite like I do, but if I make up my mind to do something I'm going to do it."

REFERENCES

1. Albee, George W. "A Revolution in Treatment of the Retarded." *Human Intelligence*. (Edited by L. McVicker Hunt.) New Brunswick, N.J.: Transaction, Inc., 1972. pp. 195-209.
2. Ariès, Philippe. *Centuries of Childhood*. (Translated by Robert Baldick.) New York: Vintage Books, 1965. 445 pp.
3. Bijou, Sidney W. "Behavior Modification in Teaching the Retarded Child." *Behavior Modification in Education*. The 72nd

Yearbook of the National Society for the Study of Education. (Edited by Carl E. Thoresen.) Univ. of Chicago Press, 1973. p. 261.

4. _____ . "The Technology of Teaching Young Handicapped Children." *Behavior Modification: Issues and Extensions.* (Edited by Sidney W. Bijou and Emilio Ribes-Inesta.) New York: Academic Press, Inc., 1972. pp 27-42.
5. Blake, Kathryn A. *Teaching the Retarded.* Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1974. pp. 7-13.
6. Borinsky, Mark E. "Provision of Instruction to Handicapped Pupils in Local Public Schools, Spring 1970." Washington, D.C.: DHEW, Office of Education, National Center for Educational Statistics, 1973. Table 1, p. 2.
7. Bruininks, Robert H., and John E. Rynders. "Alternatives to Special Class Placement for Educable Mentally Retarded Children." *Focus on Exceptional Children* 3: 1-12; 1971.
8. Bury, J.B. *A History of Greece.* New York: Random House, Inc., 1933. p. 125.
9. Canner, Norma. . . . *and a Time To Dance.* Boston: Beacon Press, 1968. Unpaged.
10. Carroll, John B. "Psycholinguistics in the Study of Mental Retardation." *Language and Mental Retardation: Empirical and Conceptual Considerations.* (Edited by Richard L. Schiefelbusch, Ross H. Copeland, and James O. Smith.) New York: Holt, Rinehart and Winston, Inc., 1967. pp. 39-53.
11. Cartwright, Charles. "The Children of Mimosa: A Whisper of Hope for the Mentally Retarded." *The PTA Magazine.* 68: 29-31; November 1973.
12. Dobson, James C. "The Origins of Intelligence." *The Mentally Retarded Child and His Family: A Multidisciplinary Handbook.* (Edited by Richard Koch and James C. Dobson.) New York: Brunner/Mazel, Inc., 1971. pp. 11-21.
13. Durant, Will. *The Life of Greece.* New York: Simon and Schuster, Inc., 1939. p. 81.
14. Eaton, J.W., and Weil, R.J. *Culture and Mental Disorders: A Comparative Study of the Hutterites and Other Populations.* Glencoe, N.Y.: Free Press, 1955. 254 pp.
15. Estes, William K. *Learning Theory and Mental Development.* New York: Academic Press, Inc., 1970. p. 1.

16. Finn, Jeremy D. "Expectations and the Educational Environment." *Review of Educational Research* 42: 387-408; Summer 1972. pp. 407-408.
17. Goddard, Henry. *Feeble Mindedness—Its Causes and Consequences*. New York: Macmillan Company, 1912. 599 pp.
18. Graubard, Paul, and Rosenberg, Harry. *Classrooms That Work*. New York: E.P. Dutton & Co., Inc., 1974. pp. 93-96.
19. Grossman, Herbert J., and others, editors. *Manual on Terminology and Classification in Mental Retardation*. 1973 revision. Washington, D.C.: American Association on Mental Deficiency, 1973. p. 5.
20. Henshel, Anne Marie. *The Forgotten Ones: A Sociological Study of Anglo and Chicano Retardates*. Austin: University of Texas Press, 1972. pp. 21-99.
21. Hewett, Frank M. *Education of Exceptional Learners*. Allyn and Bacon, Inc., 1974. pp. 184-86.
22. Jacobs, Jerry. *The Search for Help: A Study of the Retarded Child in the Community*. New York: Brunner/Mazel, Inc., 1969. 135 pp.
23. Kolstoe, Oliver P. *Teaching Educable Mentally Retarded Children*. New York: Holt, Rinehart and Winston, Inc., 1970. pp. 4-12.
24. Lippman, Leopold. *Attitudes Toward the Handicapped: A Comparison Between Europe and the United States*. Springfield, Ill.: Charles C. Thomas, Publisher, 1972.
25. MacMillan, Donald L. "The Problem of Motivation in the Education of the Mentally Retarded." *Exceptional Children* 37: 579-86; November 1973.
26. Meile, Richard L. "Summary of Major Findings of the General Public Study." Lincoln, Nebr.: Nebraska Department of Public Institutions, 1968.
27. Metz, A. Stafford. "Number of Pupils with Handicaps in Local Public Schools, Spring 1970." Washington, D.C.: DHEW, Office of Education, Educational Manpower Statistics Branch, 1973. Table 1, p. 2.
28. Monroe, J., and Howe, Clifford E. "The Effects of Integration and Social Class on the Acceptance of Retarded Adolescents." *Education and Training of the Mentally Retarded*. 6: 20-24; February 1971.

29. National Association for Retarded Citizens. *The Right To Choose: Achieving Residential Alternatives in the Community*. Arlington, Texas: the Association, n.d. 80 pp.
30. National Society for the Study of Education. *Forty-Ninth Yearbook. Part II*. Chicago: Univ. of Chicago Press, 1950. pp. 5-6.
31. Nelson, C.C., and Schmidt, L.J. "The Question of the Efficacy of Special Classes." *Exceptional Children* 37: 381-84.
32. Perske, Robert. *New Directions for Parents of Persons Who Are Retarded*. Nashville: Abingdon Press, n.d. p. 55.
33. Ibid. pp. 36-37.
34. Prehm, Herbert J., and Corsson, James E. "The Mentally Retarded." *Review of Educational Research* 39: 5-24; February 1969. p. 14.
35. The President's Committee on Mental Retardation. *MR 72: Islands of Excellence*. Committee report. Washington, D.C.: the Committee, 1972. 54 pp.
36. _____ . *Silent Minority*. Washington, D.C.: the Committee, 1973. p. 30.
37. Reynolds, M.C. "Categories and Variables in Special Education." In *Exceptional Children in Regular Classrooms*. Minneapolis: University of Minnesota, 1970. pp. 30-38.
38. Reynolds, Maynard C., and Balow, Bruce. "Categories and Variables in Special Education." *Exceptional Children* 38: 357-66; January 1972.
39. Sarason, Seymour B., and Gladwin, Thomas. "Intelligence and Culture." *Mental Subnormality. Part II: Psychological and Cultural Problems in Mental Subnormality*. (Parts I and II by Richard L. Masland, Seymour B. Sarason, and Thomas Gladwin.) pp. 301-308.
40. Sheila, M. "When You Wish Upon a Star: The Self-Fulfilling Prophecy and Special Education." *Education and Training of the Mentally Retarded* 3: 189-93; 1968.
41. Siegel, Ernest. *Special Education in the Regular Classroom*. New York: The John Day Company, 1969. pp. 54, 62, 82.
42. Smith, Robert M. *Clinical Teaching: Methods of Instruction for the Retarded*. New York: McGraw-Hill, Inc., 1968. 292 pp.
43. Smith, Sandra. "The Application and Reinforcement of Principles in the Classroom." *Orientation to Language and Learning Disorders*. (Edited by Mitchell R. Burlowsky.) St. Louis: Warren H. Green, Inc., 1973. p. 166.

44. Sparks, Howard L., and Blackman, Leonard S. "What Is Special About Special Education Revisited: The Mentally Retarded." *Exceptional Children* 31: 242-47; January 1972.
45. Suppes, Patrick. "A Survey of Cognition in Handicapped Children." *Review of Educational Research* 44: 145-76; Spring 1974. p. 160.
46. Task Force on Children out of School. *The Way We Go to School: The Exclusion of Children in Boston.* Task force report. Boston: Beacon Press, 1971. 85 pp.
47. Taylor, Frank D., and others. "A Learning Center Plan for Special Education." *Focus on Exceptional Children* 4: 1-7; 1972.
48. U.S. Dept. of Health, Education and Welfare, Social and Rehabilitation Service. "Police, Courts, and the M.R. Offender." Washington, D.C.: GPO, 1973.
49. Weintraub, Frederick J., and Abeson, Alan. "New Education Policies for the Handicapped: The Quiet Revolution." *Phi Delta Kappan* 55: 526-29, 569; April 1974.
50. Wisland, Milton V. *Psychoeducational Diagnosis of Exceptional Children.* Springfield, Ill.: Chas. C. Thomas, Pub. 1974. p. 4.
51. Ibid. pp. 3-25, 56-101.
52. Wolfensberger, Wolf. "Models of Mental Retardation." *New Society* 15: 51-53; 1970.

ADDITIONAL READINGS

Binet, A., and Simon, T. "Upon the Necessity of Establishing a Scientific Diagnosis of Inferior States of Intelligence." Reprinted in *Studies in Individual Differences.* (Edited by J.J. Jenkins and D.G. Patterson.) New York: Appleton-Crofts, 1961. pp. 81-90.

Bradfield, Robert H., and others. "The Special Child in the Regular Classroom." *Exceptional Children* 39: 384-90; February 1973.

Braginsky, Benjamin M., and Braginsky, Dorothea D. *Hansels and Gretals: Studies of Children in Institutions.* New York: Holt, Rinehart and Winston, Inc., 1971. 212 pp.

Carvajal, Antonio L. "Predictors of Four Criteria of Self-Concept in Educable Mentally Retarded Adolescents." *Exceptional Children* 39: 239; November 1972.

Friedman, Paul, preparer. *Mental Retardation and the Law: A Report on Status of Current Court Cases.* Washington, D.C.: DHEW, Office of Ass't Sec'y for Human Development, Presi-

dent's Committee on Retardation, Feb. 1975 (in press). Revised quarterly.

Gardner, Ovitta Sue. "Out of the Classroom: The Birth and Infancy of the Resource Center at Hauula." *Exceptional Children* 38: 53-58; September 1971.

Iano, Richard P. "Shall We Disband Special Classes?" *Journal of Special Education* 6: 167-77; Summer 1972.

Jackson, Stanley E., and Taylor, George R. *School Organization for the Mentally Retarded: Basic Guides*. Second edition. Springfield, Ill.: Charles C. Thomas, Publisher, 1973. 156 pp.

Jensen, Arthur R. *Genetics and Education*. New York: Harper & Row, Publishers, 1972. 378 pp.

Lippman, Leopold, and Goldberg, I. Ignacy. *Right to Education: Anatomy of the Pennsylvania Case and Its Implications for Exceptional Children*. Columbia University, 1973. 141 pp.

McGurk, F.C.J. " 'Psychological Tests'—A Scientist's Report on Race Differences." *U.S. News & World Report* 41: 92-96; Sept. 21, 1956.

Meyerowitz, Joseph H. "Maternal Involvement and Educational Retardation." *J. of Marriage and the Family* 28: 89-91; Feb. 1966.

———. "Parental Awareness of Retardation." *American Journal of Mental Deficiency* 71: 637-43; January 1967.

Meyers, C. Edward. "The School Psychologist and Mild Retardation—Report of an Ad Hoc Committee." *Mental Retardation* 11: 15-20; February 1973.

Meyers, C. Edward; Eyman, Richard K.; and Tarjan, George; editors. *Sociobehavioral Studies in Mental Retardation*. Washington, D.C.: American Association on Mental Deficiency, 1973. 272 pp.

Renz, Paul, and Simenson, R.J. "The Social Perception of Normals Toward Their EMR Grade-Mates." *Amer. J. of Mental Deficiency* 74: 405-408; Nov. 1969.

Sena, Carl. *The Fallacy of I.Q.* N.Y.: The Third Press, 1973. 184 pp.

Stearns, Keith, and Swenson, Stuart H. "The Resource Teacher, An Alternative to Special Class Placement." *Viewpoints* 49: 1-12; January 1973.

Taylor, George R. "Special Education at the Crossroad: Class Placement for the EMR." *Mental Retardation* 11: 30-33; April 1973.

Waite, Kathleen Barnette. *The Educable Mentally Retarded Child: Guidance and Curriculum*. Springfield, Ill.: Charles C. Thomas, Publisher, 1971. 578 pp.